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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,829	01/22/2002	Markus Heidrich	1960	8525

7590

09/12/2003

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EXAMINER

NGUYEN, TRAN N

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 09/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/031,829	HEIDRICH, MARKUS	
	Examiner	Art Unit	
	Tran N. Nguyen	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 23 May 2003 and 08 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The disclosure is objected to because of the following informalities:

The spec. refers to claim 1 in the description (for example page 1 of the spec). The applicant is requested to delete any claim reference as detail disclosure in the spec. Appropriate correction is required.

The amendment filed 7/8/03 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The newly amendment with newly added material, which is not supported by the original disclosure, is as follows:

The coil [frame] body 28 ***is integrally [extruded] injection-molded*** on the oblong pole shoe (24).

The term "extruded" is understood as protrude or project, not injection-molded, as amended. This understanding is supported by the specification of the application as follow:

On page 4, lines 1-2, the spec describes the oblong pole shoe (24) is a pole shoe (15) that is longer in both axial directions;

As shown by figure 3 of the application the oblong pole shoe is formed separate from the coil body (28), wherein the oblong pole shoe (24) has a center opening (26) (shown in fig 3);

As shown by figure 4 of the application *the coil body (28) is connected to the oblong pole (24) at the center opening (26) and integrally protruded therefrom, not integrally injection-*

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molded thereon, i.e., coil body (28) is not placed above, or is not placed to cover, the oblong pole shoe.

Thus, from these drawings and the description on page 4, the coil body (28) is understood to be made of plastic and connected to the oblong pole shoe by integrally protruding (or projecting) from the oblong pole shoe (24).

Therefore, the newly added material *the coil body (28) is integrally injection-molded on the oblong pole shoe (24)* is not supported by the original disclosure.

Applicant is required to cancel the new matter in the reply to this Office Action. Nevertheless, The Examiner takes Official Notice that plastic-injection-molded coil bodies (also known as coil bobbins or coil spools) are well known in the art of dynamoelectric machinery.

Claim Rejections - 35 USC 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-3, and 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, “*the coil (11) is secured to the stator pole tooth (7) by means of a pole shoe (15) wherein a coil body (28) is integrally injection-molded on the pole shoe (15)*” is indefinite because it is new matter and does not have support from the spec.

Claim Rejections - 35 USC-102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Barbati (EP 0910152).

Barbati discloses an internal-rotor motor having an external stator having stator pole teeth (10), each with pole shoes (11); preassembled coils (16) is slid onto the stator and secured to the stator pole teeth by means of the pole shoe, *wherein the coil body (12) is disclosed to be integrally-molded plastic covering on each tooth of the stator (col 2 lines 32-51)* and provided with electrical connecting element.

Thus, regarding the limitations of the coil body being integrally molded, Barbati explicitly discloses that the coil body (also known as coil bobbin or coil spool) is a plastic integrally molded structure.

Claim Rejections - 35 USC-103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action: A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barbati in view of Randolph et al (US 2189524).

Barbati discloses the claimed invention, except for the added limitations of the following: the pole shoe is made of soft magnetic solid material.

Randolph, however, teaches a magnetic core having solid soft magnetic pole shoe (10, 10') being attached to the poles of the soft magnetic core. Those skilled in the art would realize that the Randolph's important teaching is to provide the magnetic core with plural poles, wherein each pole having a pole shoe made of solid soft magnetic material. Solid soft magnetic pole shoe would have high magnetic conductivity; thus, increasing the magnetic permeability of the shoes.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the stator core by fabricating the pole shoes with solid magnetic material, as taught by Randolph. Doing so would enhance the magnetic field of the magnetic core by enhancing the magnetic flux flow therein.

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barbati and Randolph, and further in view of Suzuki (US 5852335).

The combination of Barbati and Randolph refs discloses the claimed invention, except for the added limitations of the coil body having electrical connecting pin.

Suzuki, however, teaches coil form (24) having electrical connecting pins (25) for connecting the stator windings together and to the power supply.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the stator by providing coil form with connecting pins, as taught by Suzuki. Doing so would provide means for connecting the stator windings together and to the power supply.

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Claim 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barbati and in view of DE 700420 (hereafter DE'420)

Barbati discloses the claimed invention, except for the added limitations of the pole shoe is secured to the stator pole tooth by means of press fit.

DE'420, however, teaches an internal-rotor motor having an external stator having at least one stator pole tooth (1), each with pole shoes (12 Fig 2) made of soft magnetic solid material, wherein the pole shoe is secured to the stator pole tooth by press-fitting the dove-tail connecting features (11, 14) respectively of the pole tooth and the pole shoe. DE's 420 would facilitate the installation of the preassembled coil structure onto the stator and secured thereto by the press-fitted pole shoe.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the stator by configuring the pole shoe to be press-fitted to the pole tooth, as taught by DE'420. Doing so would facilitate the assembling step of the preassembled coil structure onto the pole and secured thereon.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N Nguyen whose telephone number is (703) 308-1639. The examiner can normally be reached on M-F 6:00AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703)-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3431 for regular communications and (703)-395-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1782.



TRAN NGUYEN

PRIMARY PATENT EXAMINER

TC-2800